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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,988	02/12/2002	Chris E. Rowen	LEGAP002	3521
57255 7590 02/14/2011 VAN PELT, YI & JAMES LLP AND EMC CORPORATION 10050 N. FOOTHILL BLVD. SUITE 200 CUPERTINO, CA 95014				
EXAMINER CHANKONG, DOHIM				
ART UNIT 2452		PAPER NUMBER		
NOTIFICATION DATE 02/14/2011		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/072,988

Applicant(s)

ROWEN, CHRIS E.

Examiner

DOHM CHANKONG

Art Unit

2452

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 7, 15, 18-20, 37, 39-41 and 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 7, 15, 18-20, 37, 39-41, and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This non-final rejection is in response to Applicant's amendment filed on 9/7/2010.

Applicant amends claims 1, 15, 18, and 37, adds claim 45, and previously cancelled claims 2, 5, 6, 8-14, 16, 17, 21-36, 38, and 42-44. Accordingly, Applicant presents claims 1, 3, 4, 7, 15, 18-20, 37, 39-41, and 45 for further examination.

I. CONTINUED EXAMINATION UNDER 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/7/2010 has been entered.

II. RESPONSE TO ARGUMENTS

Applicant's arguments with respect to claims 1, 3, 4, 7, 15, 18-20, 37, 39-41, and 45 have been considered but are moot in view of the new ground(s) of rejection.

III. SPECIFICATION

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not provide proper antecedent basis for "computer program product" and "computer readable medium."

IV. CLAIM REJECTIONS – 35 U.S.C. § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

A. Claim 45 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 45 is rejected for being directed to a computer program product embodied in a computer readable medium that may be interpreted as purely software which is not statutory under § 101. Applicant's specification does not provide any description for "computer program product" or "computer readable medium." The terms are therefore given their broadest reasonable interpretation.

A "computer program product" may be interpreted as a software computer program. The broadest reasonable interpretation of "computer readable medium" typically covers forms of non-transitory tangible media and transitory propagating signals per se.

Since both the "computer program product" and "computer readable medium" may be interpreted as software and a signal, respectively, claim 45 may be directed to non-statutory subject matter. Applicant may overcome this rejection by overcoming the objection to the specification (see section II above) and by amending the claim to recite "non-transitory computer-readable storage medium."

V. CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Priority date for the concatenating and hashing feature

The independent claims contain a limitation reciting concatenating a message sender and a message sender submission time into a string and applying a hash algorithm to that first string. This feature does not seem to be described or supported in Applicant's provisional applications 60/268,092 or 60/347,238. Thus, for the purposes of this rejection, this feature has the priority date of February 12, 2002 which is the filing date of Applicant's application.

If Applicant disagrees with this assessment, Applicant should cite the specific pages in either application which provide written description consistent with § 112, 1st paragraph of the concatenating and hashing feature.

B. Claims 1, 3, 7, 15, 18, 20, 37, 39, 41, and 45 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hughes, U.S. Patent No. 6,122,372, in view of Yeager, U.S. Patent No. 6,167,402, in further view of Graham et al., U.S. Patent Publication No. 2002/0178271 ["Graham"].

Applicant should note that all citations are to Hughes unless otherwise noted.

Claims 1, 15, 37, 41, and 45

As to claim 1, Hughes as modified by Yeager and Graham discloses a method for identifying a unique electronic mail message in a plurality of electronic mail messages extracted from an electronic mail messaging system, the method comprising:

retrieving from a first mailbox on the electronic mail messaging system a copy of a message [Yeager, column 2 «lines 49-62»: teaching the well known feature of retrieving messages from a user's inbox];

computing a first message tag, at least in part by:

concatenating a message sender of the first message and a message sender submission time of the first message into a first resulting string [column 10 «lines 30-35» | column 11 «lines 16-20» | Figure 2 where : Hughes hashes a “message set” where the message set includes the “current time” and sender ID. Hughes describes the “current time” as “the time that the message was sent by the sender” & Graham, 0218: disclosing hashing a concatenation of a time-stamp and source identifier (i.e., message sender) of a message]; and

applying a hash algorithm to the resulting string [column 10 «lines 30-35» | column 11 «lines 16-20»];

storing the first message in a message archive [column 13 «lines 58-59»: storing the message in a database];

storing the first message tag in a single shared index file [column 1 «lines 20-21»: the message ID is generated as a hash function | column 13 «lines 56-57»: storing the message ID in the database | column 3 «lines 23-30» | column 19 «lines 17-27»: Hughes implies an index file through his teaching of searching for a match in the database];

retrieving from a second mailbox on the electronic mail messaging system a second message, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox [Yeager, column 2 «lines 49-62»: teaching the well known feature of retrieving

messages from a user's inbox | column 7 «line 66» to column 8 «line 1»: disclosing multiple user folders (i.e., mailbox) for different users & Hughes, Fig. 10 «item 1002»: retrieving a message];

computing a second message tag at least in part by:

concatenating a message sender of the second message and a message sender submission time of the second message into a second resulting string [column 10 «lines 30-35» | column 11 «lines 16-20» | Figure 2 where: Hughes hashes a “message set” where the message set includes the “current time” and sender ID. Hughes describes the “current time” as “the time that the message was sent by the sender & Graham, 0218: disclosing hashing a concatenation of a time-stamp and source identifier (i.e., message sender) of a message]; and

applying the hash algorithm to the second resulting string [column 10 «lines 30-35» | column 11 «lines 16-20»]; and

reviewing a list of message tags including the first message tag stored in the single shared index file [column 19- «lines 21-23»: reviewing the database of message IDs], wherein:

in the event the second message tag matches the first message tag, determining the second message is a duplicate of the first message already stored in the message archive [column 19 «lines 17-27»];

in the event the second message tag does not match any of the list of message tags including the first message tag, determining the second message is not a duplicate message already stored in the message archive and subsequently:

storing the message tag in the message archive [column 19 «lines 37-47»]; and

storing the second message tag in a single shared index file [column 19 «lines 37-47»].

As indicated by the foregoing mapping, Hughes does not expressly disclose (1) retrieving a first and second message from a first and second mailbox, respectively, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox; and (2) concatenating the message sender and a message submission time. However, both of these features were well known in the art at the time of Applicant's invention as evidenced by Yeager and Graham.

1. Yeager discloses retrieving a first and second message from a first and second mailbox, respectively, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox.

Yeager teaches the first feature in an invention directed towards a message store that contains an index file [abstract]. Like Hughes, Yeager discloses hashing email messages in order to prevent storing duplicate copies within a message store [column 10 «lines 5-7»]. Unlike Hughes, Yeager discloses (1) retrieving from a mailbox on the electronic mail messaging system a copy of the message [column 2 «lines 49-62»: teaching the well known feature of retrieving messages from a user's inbox] and (2) that the messages are retrieved from a plurality of mailboxes associated with multiple electronic mail recipients [column 2 «lines 49-62» | column 7 «lines 7-11»].

Despite not expressly teaching a plurality of mailboxes, this feature is implied by the fact that there are multiple mail recipients. It would have been obvious to one ordinary skill in the art to have reasonably inferred the presence of multiple inboxes (and therefore retrieval from them) when there are multiple recipients. It would have been further obvious to one of ordinary skill in

the art to have modified Hughes invention with Yeager's teachings retrieving and storing email messages. Given Hughes teaching that his invention is compatible with emails [column 8 «lines 43-44»], one would have been motivated to adapt Hughes message store to be compatible with email systems to increase the store's functionality and usefulness.

2. Graham discloses hashing a concatenation of a message time-stamp and message source identifier.

While Hughes discloses computing a message tag by using a message sender and message submission time, Hughes does not expressly disclose concatenating these two properties. However, Graham discloses concatenating a message time stamp (i.e., submission time) and a message source identifier where Graham describes this as a user identifier (i.e., message sender) [Graham, Fig. 6B describing Source ID as a user identifier | 0218].

Applying Graham's teaching to Hughes would result in the concatenation of Hughes' sender ID [Fig. 2 «item 214»] (i.e., Graham's source ID) and Hughes' time [Fig. 2 «item 207»] (i.e., Graham's timestamp). This combination reads on the claimed limitation.

It would have been obvious to one of ordinary skill in the art to have modified Hughes to include Graham's teachings of hashing a concatenation of a message's source ID and timestamp. Such a modification to Hughes' system is an example of simple substitution of one known element (Hughes' hashing of message properties) for another (Graham's specific teaching of hashing a concatenation of a message's source ID and timestamp) to obtain predictable results (Hughes' invention modified to create a message ID by hashing the concatenation of the sender ID and time stamp). See MPEP § 2143.

As to claims 15, 37, 41, and 45, they are rejected for at least the same reasons set forth for claim 1.

Claims 3, 18, and 39

As to claim 3, Hughes as modified by Yeager and Graham discloses applying a hash algorithm to the message tag forms a uniform string wherein the uniform string, wherein the uniform string has a predetermined length [column 10 «lines 30-35» | column 11 «lines 16-20» | Figure 2]. As to claims 18 and 39, they are rejected for at least the same reasons set forth for claim 3.

Claims 7 and 20

As to claim 7, Hughes as modified by Yeager and Graham discloses the index file is stored in a relationship database system [column 3 «lines 23-30» | column 19 «lines 17-27»]. As to claim 20, it is rejected for at least the same reasons set forth for claim 7.

C. Claims 4, 19, and 40 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hughes, in view of Yeager and Graham, in further view of Mattis et al, U.S. Patent No. 6,292,880 [“Mattis”].

As to claim 4, while Hughes as modified by Yeager, Graham, and Mattis teaches hashing message properties, Hughes does not expressly disclose utilizing MD5 as the hash algorithm. However, implementing MD5 as a hash algorithm with respect to messages was well known in the art at the time of Applicant's invention.

Mattis expressly discloses hashing message tags using the MD5 algorithm to form a uniform string [Mattis, column 9 «lines 48-63»]. It would have been obvious to one of ordinary skill in the art to have implemented Hughes hashing algorithm as an MD5 algorithm. The MD5 hashing algorithm was well known in the art at the time of Hughes invention.

As to claims 19 and 40, they are rejected for at least the same reasons set forth for claim

VI. CONCLUSION

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/
Primary Examiner, Art Unit 2452